Cover Page 1 of 2

Project Title:	**VBM Transition**
Project Subtitle:	**Ballot packet tracking and accountability**
Project Number: (If Existing Project)	
Date of Submittal:	**May 15, 2007**
Agency/Department:	**REALS, DES**
Business Sponsor:	**Paul Tanaka**
Prepared By:	**Bill Huennekens**

Project Primary Benefit Alignment:

	Accountability/Transparency	Customer Service/Access	Efficiency	Risk Management
Check one only	☒	☐	☐	☐

Business Outcomes: *(Check all that apply)*

Efficiency	☐	Offers a positive return on investment (ROI)
	☒	Improves productivity and/or reduces future expenditures
Public Access & Customer Service	☒	Improves accessibility of public records
	☒	Improves accessibility to county services, resources, and/or officials
	☒	Improves the quality and/or usability of internal and/or external county services
Transparency and Accountability for Decisions	☒	Makes decisions and decision-related materials more easily available
	☒	Supports ability to track long-term outcomes
	☒	Supports visibility into the decision process
	☐	Supports input and feedback related to countywide decisions
Risk Management	☒	Intended to improve security and provide legally mandated services and basic operations support
Other	☐	Fulfill regulatory requirements
	☒	Provide tactical agency operational improvements
	☐	

Technical Outcomes: *(Check all that apply)*

Increases architectural flexibility	☐	Utilizes open standards
	☐	Employs web-based technologies
	☒	Utilizes commercial off the shelf software
	☒	Leverages and/or extends integration architecture
Improves data management	☒	Increases data security
	☐	Increases data privacy
	☒	Improves data accuracy
	☒	Reduces data redundancy
Improves technology operations	☒	Enhances system reliability
	☒	Consolidates hardware/software
	☒	Standardizes or streamlines existing operations

Project Type: *(Will Help Determine PRB Review Plan)*

	Implementation	Business Case/Study/Plan	IT Equipment Replacement
Check One Only	☒	☐	☐

Cover Page 2 of 2

Project Phase: (Underline project phase applicable to this submittal)

Budget Request:

☐ **Conceptual Review - Provide a concise, informative, high level summary for sections 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, and 2.0. Conceptual review summaries should be 1-3 pages only.**

☐ **Formal Budget Request**

Project Review Board Business Case Deliverables

☒ **Phase II - PRB Business Case Presentation**

- **Update for any major changes to scope, schedule, and budget if significantly different from the Budget Request Business Case.**
- **OMB and agency to confirm baseline (current)/ target measurements and identify and plan for future budget actions prior to PRB review.**

☒ **Other – This business case is responsive to Council Ordinance 15623 that provisos HAVA grant funding for the purchase of a ballot packet tracking and accountability system for King County.**

Change Summary from previous submittals of Business Case:

1) Describe any important or significant changes to project scope, schedule, and budget from previous version of business case submittal.
The target date for transition to vote by mail is a special election in 2008.

2) Describe any important or significant changes to expected benefits or ongoing O&M costs and other operational impacts from previous version of business case submittal.

NA, no previous business case submitted.

Executive Summary

On June 19, 2006, the King County Council adopted Ordinance 15523, directing Elections in King County be conducted entirely by mail in 2007 or 2008, effectively establishing King County as the largest local jurisdiction in the United States to conduct all elections by mail. The transition to an entirely vote-by-mail elections system will streamline operations, allowing resources to be focused on the process that voters have chosen in increasing numbers.

The County Council specified four conditions to be met prior to implementation of vote by mail. Among these requirements, the County Council requested a business case for the creation of an electronic tracking system that will allow voters, through the use of the Internet, to follow the movement of their ballot as it travels from King County to the voter and back to King County for counting and crediting the voter for voting.

When King County transitions to all mail voting in 2008, King County Elections will have the technology to allow each individual voter to track the status of their ballot packet; the ultimate indication of transparency and accountability of the vote-by-mail election process. This accountability will build voters' trust and confidence in the integrity of the election process and will improve ballot reconciliation.

This business case analyzes technologies from the four vendors who responded to our request for information. These technologies will allow voters to determine if:

1. Voter's ballot packet has been assembled and handed off to United States Postal Service (USPS).
2. King County confirms receipt of returned ballot packet (i.e. voted and USPS un-deliverables).
3. Signature on ballot packet has been verified or challenged.
4. Ballot packet has been opened for ballot extraction.

Additionally, this business case examines these technologies to see how each would increase the accuracy, accountability, security, transparency and efficiency of our mail ballot processing.

Based on the careful evaluation of the four vendors who responded to our request for information through this business case, King County Elections recommends investment in two: the Pitney Bowes Relia-Vote and VoteHere MiBT solutions.

The Pitney Bowes Relia-Vote and VoteHere MiBT (Mail-in Ballot Tracker) solutions provide the best equipment and software applications available and will enable King County to meet its overall goals – the ability for voters to follow the movement of their ballots from King County, to the voter, and back to King

County for counting and crediting. This solution will provide King County with increased accuracy, accountability, security, transparency and efficiency.

1.1 Problem statement, vision and goals

When King County moves to all vote-by-mail, in early 2008, about 35 percent of registered voters who currently vote at the polls will join the nearly 65 percent of permanent absentee voters and cast their ballots by mail, rather than at their polling places. This increase will result in nearly 1 million voters receiving a mail ballot packet for each countywide election.

The current process of tracking and accounting for mail ballots as they are prepared for mailing, received from voters and readied for tabulation is manual and labor intensive. With the current resources, systems and equipment the ability to achieve the level of reconciliation required will be challenging.

Additional applications and equipment are needed to enhance and effectively alter this process with automation. Change is necessary to achieve the highest level of accuracy, accountability, security, transparency and efficiency.

As King County Elections moves towards an entirely vote-by-mail system, the following goals are sought:

- Improve the **accuracy** of our elections by 1) minimizing the hand-off between staff and processes, 2) minimizing the manual aspects of work such as data entry of reconciliation data and 3) improve the consistency of decisions by utilizing technology.
- Improve the **accountability** of our elections by 1) increasing the amount and type of data we capture and use for reconciliation processes and 2) providing near real-time reconciliation.
- Improve the **security** of our elections by 1) limiting inbound processes performed off-site and 2) minimizing the movement of physical ballots between processes and staff.
- Improve the **transparency** of our elections by 1) creating simple, efficient work flows and 2) capturing and reporting the status of a voter's mail ballot packet at various points in the process.
- Improve the **efficiency** of our elections by 1) eliminating or combining processes where appropriate and 2) utilizing technology to increase through-puts.

In addition, any equipment acquired for ballot packet tracking and accountability will adhere to the established goals and guiding principles set forth in King County's 2006 Strategic Technology Plan, improving efficiency, public access and customer service, transparency and accountability, risk management, technology architectural flexibility, data management, and technology operations. *See* page six of the King County, Washington, Strategic Technology Plan 2006-

2008, at
http://www.metrokc.gov/oirm/services/reports/strategic_plan/Strategic_Technology_Plan_2006-2008.pdf.

1.2 Overview and background

Current Process

Ballot-related materials, voted absentee and mail ballots are currently batched together upon return to King County in trays of 200 to 400 ballot packets (signature envelope, security envelope and ballot). Each batch of ballot packets is monitored as it moves through the process from receipt to tabulation and any transaction to that batch and its associated data are recorded manually on a batch slip. This transaction data is used to validate that all ballot packets are accounted for and any discrepancies are identified and resolved immediately.

The reconciliation and accountability processes and procedures currently in use for the inbound ballot packets were recognized nationally in 2006 as best practices by the National Association of County Recorders, Election Officials and Clerks.

*See, c*urrent process flow chart, exhibit 1. For a complete description of the current process and the procedures used, please refer to exhibit 2.

Focus Group Research

To meet the requirements described in the ballot tracking and accountability mandate in section two of King County Ordinance 15523, focus groups were conducted, exploring voters' expectations and preferences for a ballot tracking system. *See,* exhibit 3, for complete focus group findings.

In order to align with voters' expectations and ensure ballot secrecy and voter privacy, King County Elections (KCE) established the following four ballot packet tracking points to enable voters to track their ballot packets in the outbound and inbound processes.

1. Voter's ballot packet has been assembled and handed off to United States Postal Service (USPS)
2. King County confirms receipt of returned ballot packet (i.e. voted and USPS un-deliverables).
3. Signature on ballot packet has been verified or challenged.
4. Ballot packet has been opened for ballot extraction.

1.3 Constraints and dependencies

Limitations of current ballot tracking and accountability process
Though nationally recognized, the current ballot tracking and accountability process has limitations, especially as a jurisdiction the size of King County transitions to countywide voting by mail.

1. **Designed for reconciliation.** The process is designed for reconciliation and focuses on accounting of envelopes and ballots to provide assistance for resolving discrepancies across process points in the reconciliation process. It uses total count and does not capture individual voter information on ballot packets as a basis for reconciliation. The system is not specifically designed to allow voters to track their ballot at various points in the process.

2. **Limited tracking spectrum.** Current tracking begins at the "inbound sort" by capturing absentee voter identification number (AVID). There is no tracking of the individual ballot packet piece in the outbound process, when the ballot packet is sent from King County Elections to the voter.

3. **Batch level reconciliation.** The current process does not track and account for ballot materials end-to-end at the voter specific level. There is currently no option for a voter to track the movement of their ballot beyond signature verification, nor are there systems in place for ballot processing staff to track beyond this point at the detailed, voter-specific level.

4. **Labor intensive and time consuming.** The current process involves manual quality control, manual counting of mail pieces and ballots, manual input of total counts with challenge and ballot duplication categories, as well as manual compilation of summary statistics. The process is time consuming, occasionally taking over three hours to reconcile the numbers of signatures challenged for the end of day reports.

5. **Potential for human errors and inconsistencies in application.** The labor-intensive manual processes can increase the possibility for errors, discrepancies and inconsistencies. It requires substantial quality control efforts to identify and correct errors, discrepancies and inconsistencies.

6. **Creates processing capacity limitations.** Over 60 percent of voters are registered as permanent absentee voters. On average, 75 to 80 percent of all votes cast in a given election are cast by absentee ballot. When vote-by-mail is implemented, an additional 35 to 40 percent of ballot packets will need to be produced, assembled, processed, tracked and accounted for, requiring

additional staff, space and equipment, along with processing time needed for timely tabulation.

An investment in technology to automate these processes is necessary, to maintain uncompromised quality assurance and accuracy that meets or exceeds current accountability achievements.

Limitations on tracking ballots to the voter level

Part of the research conducted through the focus groups investigated the level that voters wanted to track their ballot and helped define what level of perceived secrecy voters would be willing to give up to achieve the preferred tracking capability. More specifically, voters were asked their opinions of placing a barcode or unique identifier directly on the ballot to confirm it went through a tabulation machine and was counted. Placing a barcode on the ballot would allow tracking of each individual ballot throughout the process, but would create issues of ballot secrecy.

Voters in the focus groups concluded that once their ballot is received they trust it will be counted. They are not interested in the use of a barcode because they fear it may be used to identify how they voted.

As a result of the focus group research and the uncertain legal and political implications, the final step of ballot tracking: confirmation that the ballot was not only opened but actually tabulated is not currently a recommended tracking point. While the encryption technology does exist, there is a tie with the voter to their ballot, posing ballot secrecy issues and legal concerns. This step also has several unknown risks that must be addressed carefully before King County considers ballot tracking to the point of tabulation.

1.4 Specific business objectives

After thoughtfully examining our current process and evaluating the King County Council's requirements for ballot and ballot envelope tracking, the specific business objectives identified for ballot tracking and accountability are:

1. **Perform ballot sorting, data capture and batching in-house.** This will increase ballot security and provide greater process transparency to the observing public. This will also allow for process efficiency by decreasing transport time and minimizing numerous manual hand-offs.

2. **Capture the signature image on the envelope.** Working with the image of the signature envelope, as opposed to the ballot-containing envelope itself, will allow KCE to place ballots in secure storage while the signature verification process occurs. Process

efficiency will be gained from side-by-side comparison on a computer monitor.

3. **Implement automatic signature recognition.** The use of automatic signature recognition will provide greater efficiency to the signature verification process. Automating this process will provide greater consistency in evaluating signatures. Ultimately, KCE staff will examine each signature rejected by the software application.

4. **Automate data capture for reconciliation.** Automating data captured for accountability and reconciliation will remove the variable of manual data entry, providing greater efficiency and accuracy. Greater accountability and transparency will be accomplished through improved reporting capabilities.

5. **Capture voter data after a ballot packet has been opened.** The ability to capture data after a voter's ballot packet has been opened and the security envelope with the ballot has been removed, will increase process transparency, allowing the voter to confirm that their ballot is ready for tabulation. This will occur with hand scanners at each opening station or through high speed envelope scanners at quality control stations. Data captured will also provide greater accountability and efficiency for reconciliation purposes.

1.5 Project assumptions and risks

In moving towards implementation of a ballot tracking and accountability system, there are several baseline assumptions and known risks that must be explored. The following list of assumptions relate specifically to upgrading and introducing new components to our current ballot tracking and accountability system and form the foundation by which all future work will be built.

It is assumed that with vote by mail, the standards for transparency, tracking and accountability must be present to assure voters' confidence that their ballots are processed and counted. It is with these assumptions that the current ballot packet tracking and accountability processes and procedures have been studied and evaluated, and technology applications explored to meet the expectations concerning ballot packet tracking and accountability.

Security

- Security and ballot safety will be primary elements in the consideration and evaluation of various vendor solutions for improving ballot tracking and accountability.

Legislation changes

- The ability to track each ballot through the entire tabulation process requires the placement of a unique identifier on the ballot. At any point in time, a court order or adoption of new legislation by Congress or the state legislature could prohibit the presence or use of a unique identifier on the ballot. This will prevent tracking individual ballots once they have been opened and separated from the reply envelope, severing ties between ballot and voter. KCE does not recommend placing a unique identifier on the ballot at this point in time. For more information, please reference exhibit 4, the white paper prepared on ballot tracking with and without a unique identifier.

- The Office of the Secretary of State (OSOS) will have established rules and regulations for the automated signature verification technology software and hardware applications by December 2007, to assure there is sufficient time for installation, training and testing of the module and data compatibility with existing election systems (GEMS, DIMS and web applications).

Equipment

- The selected equipment and software solution modules will be available and ready to be integrated incrementally, assuring a gradual transition to vote by mail with thorough and precise ballot tracking and accountability processes.

Transition Schedule

- It is assumed that there will be no unforeseen or unanticipated King County, Washington State, and/or federal legislative changes that will impede the transition to vote-by-mail in King County.

- The schedule for transition to VBM in 2008 incorporates the assumption that the 2007-2008 elections calendar will not be altered unexpectedly. This includes the presidential preference primary in February or March 2008.

Oversight

- KCE will continue to look to the recommendations of the Citizens' Election Oversight Committee (CEOC) and previous recommendations made by other oversight groups as the transition to all-mail voting continues.

- Technology projects will be managed within the Information Technology Governance structure. It is imperative that funding to support the VBM transition work and schedule be released on a timely basis to adhere to the approved time frame.

Communications

- KCE will maintain open lines of communication in order to seek stakeholder input to implement the optimal system.

- Through education and communication, King County Elections will provide system and equipment information and implementation updates regularly to voters and other stakeholder groups.

- To help ensure success, King County Elections will clearly communicate transition progress internally so that all Elections' staff are aware of the goals, objectives, status, and issues surrounding the transition.

Management and Leadership

- KCE will continue to demonstrate improvements through results in successful elections before the transition to VBM to continue building trust and confidence among voters, elections staff and stakeholders.

1.6 Plan of work, timeline, approach, key milestones

1.6.1 Plan of work, timeline

Prior to establishing an improved system to electronically track and account for movement of ballot packets from King County to the voter and back to King County, the following work must be accomplished.

1. A review of the current ballot tracking and accountability process and procedures. **Completed.**

2. Explore and study the availability of current technologies and related software and hardware applications to track and account for ballot packet materials. **Completed.**

3. Determine and establish ballot packet tracking points for access by voters to meet their information needs. **Completed.**

4. Determine and establish business needs that will support data capture and generation of information for the established ballot packet tracking points while serving the purpose for reconciliation. **Completed.**

5. Determine, establish and document the functional business requirements of a ballot packet tracking and accountability system that will meet the business needs of the mail ballot processing team and generate data and information required for the ballot packet track points. **Completed.**

6. Assess the functionality of each technology application deployed for tracking and accounting for ballot materials individually and how each will work with one another as an effective, integrated solution for managing the ballot packet tracking and accounting process. **Completed.**

7. Evaluate the compatibility and extent of integration of image and data captured by each of the vendor's proposed ballot tracking and accountability solutions with current systems: voter registration data and information management systems (DIMS) and ballot building, tabulation technology systems (GEMS and others). **Completed.**

8. Determine and establish criteria and mandatory requirements for the ballot tracking and accountability system. **Completed.**

9. Evaluate and determine the effectiveness and efficiency of each proposed ballot tracking and accountability solution in regard to each of the established functional business requirements and criteria. **Completed.**

Timeline

Date	Action Items	Status
April 5, 2007	Develop and establish business needs	Completed
April 5, 2007	Develop and establish functional requirements	Completed
April 12, 2007	Develop and establish criteria and mandatory requirements	Completed
April 23, 2007	Evaluation of vendor proposed systems	Completed
May 15, 2007	Information Technology Business Case and recommended solution due to the Council	Completed
June 29, 2007	Council action on Information Technology Business Case and recommended solution	In progress
Sept. 10, 2007	Develop and establish testing and implementation schedule to be negotiated with vendor during contract development.	In progress
Sept. 10, 2007	Contract completed and signed.	In progress

1.6.2 Approach

The transition to vote by mail is a collaborative and inclusive effort that involves every staff member at King County Elections. The business processes currently in place will be altered significantly and in some cases redesigned to implement an enhanced electronic ballot tracking and accountability system. The input, buy-off and involvement of the entire organization are critical. Lessons learned, institutional knowledge of current mail ballot processing core staff, prior capital investments, and

reviews by other jurisdictions using the technology will be leveraged to maximize the opportunity for success and mitigate project risks.

1.6.3 Key Milestones

- **May 15, 2007:** Transmittal of the Information Technology Business Case to the Council.
- **June 29, 2007:** Council action on Information Technology Business Case and recommended solution.
- **First quarter, 2008:** Modular and incremental implementation of tracking and accountability equipment; including delivery, thorough testing and verification of hardware and software.

1.7 Benefits and other impacts

Upgraded ballot tracking and accountability technologies will make ballot processing and tracking more accurate, accountable, secure, transparent, and efficient. New equipment and software will enhance the security of elections administration and contribute to the process of maintaining public trust and confidence in King County's election administration processes.

1.7.1 Customer benefits and other impacts

- Automation in the recommended system will allow King County to create, deliver and process the increased volume of ballots resulting from countywide vote-by-mail.
- Ability for voter to access ballot packet tracking information on the Internet, verifying and accounting for movement of their ballot packet.
- Reconciliation and production of election reports occur in nearly real-time.
- Public trust and confidence will be increased as a result of individual tracking.

1.7.2 Employee impacts

- Manual efforts required to process, track and account for ballot packets will be streamlined; opportunities for errors in processing and tracking will be reduced.
- Staff will be trained in the roles, responsibilities, processes and procedures required with the new system, in turn, enhancing quality assurance and facilitating ballot packet tracking and accountability process management.
- Reassignment and training of staff to perform data integration with other Elections data systems (e.g. DIMS, web applications).

1.7.3 Business process benefits and other impacts

Four main business process benefits will be realized by upgrading King County's ballot packet tracking and accountability equipment and software:

1. **Use of up-to-date technology.**
   New sorting, scanning, and database hardware and software will allow King County to apply technology to enhance operations and reduce manual steps that will improve the accuracy of data collection. The recommended systems employ new security features that reduce the possibility of unauthorized access, modification and/or deletion of system data.

2. **Improved process consistency and reliability.**
   Automation will minimize manual handling and processing of ballot packets, improving consistency and reliability of data captured, and reducing human handling and processing errors.

3. **Improved quality control**
   Automation reduces processing time, allowing more time for quality control and auditing of the process, procedures and data captured.

4. **Improved ballot security**
   Reduced handling of ballot packets allows them to remain in the secure vault until they are ready for opening and tabulation.

1.7.4 Technology infrastructure benefits and other impacts

A cohesive, comprehensive and wholly integrated ballot delivery and processing system with ballot tracking capabilities will strengthen King County Elections' technology infrastructure and meet the county's strategic technology objectives by:

- Strengthening security and information privacy practices by minimizing manual handling and processing;
- Improving processing speed and capacity;
- Improving reliability and accuracy of tracking data captured by auditing and validation reports;
- Improving data storage and processing capacity;
- Improving flexibility and scalability in the application of technology solutions;
- Improving efficiency and enabling electronic integration across systems;
- Using open (vendor independent) standards to promote flexibility, interoperability, cost effectiveness and mitigate the risk of dependence on individual vendors;
- Improving public access to information concerning the status of a voter's ballot package that meet voter expectations and need;
- Improving the quality and timeliness of ballot processing workflow.

1.7.5 Cost benefit analysis

In time, this automated process will mitigate rising costs associated with ballot packet tracking and accountability. The $2.7 million available in grant resources will support procurement and significantly offset initial costs for the recommended solution.

Automating the current system for vote-by-mail elections will mitigate against rising costs associated with the current labor intensive manual process including staffing, space requirements, equipment and related expenses. With deployment of improved technologies, the quality control for sorting, data and image capture, signature verification and process management will be increased.

1.8 Benefit realization measurements

Based on the benefits described above for customers, business processes, technological infrastructure and cost, the ballot packet tracking and accountability system will be monitored and evaluated. The functional performance of equipment and related software will be measured against established requirements, criteria and anticipated benefit outcomes; ultimately realizing six sigma standards, a goal KCE has established internally.

1.9 Project governance

Elections administration is at the core of public service and local government. King County Elections, the King County Executive, the King County Council and their respective staff have established requirements and guidelines to meet and exceed these voter's expectations for ballot tracking and accountability for the transition to vote-by-mail.

The King County Council has placed a proviso on the funding for an upgraded ballot tracking and accountability system, pending approval by motion of this information technology business case and recommended solution.

Implementation of the solution will be performed under the oversight of the Office of Information Resource Management (OIRM) Project Review Board to ensure appropriately managed scope, schedule, budget and risk.

1.10 Project Management

The VBM transition will be guided and directed by a team of managers from the Records, Elections and Licensing Services (REALS) Division Administration and the Elections Section; serving as the Vote by Mail Transition Leadership Team. This team will set the scope for the transition, monitor risk and quality, and make recommendations on proposed changes to the scope of the transition.

VBM Transition Leadership Team

Name	Position	E-mail address
Sherril Huff	Director Designee, REALS	sherril.huff@metrokc.gov
Sean Bouffiou	Finance and Human Resources Administrator	sean.bouffiou@metrokc.gov
Bill Huennekens	VBM Transition Manager	bill.huennekens@metrokc.gov
Bobbie Egan	Communication Specialist	bobbie.egan@metrokc.gov
Scott Baynard	Superintendent of Records, providing insight as previous Quality Assurance and Improvement Coordinator	scott.baynard@metrokc.gov
Garth Fell	Acting Election Program Manager—Ballot Processing and Delivery	garth.fell@metrokc.gov
Sandy McConnell	Acting Election Program Manager—Elections Operations	sandy.mcconnell@metrokc.gov
Laura Lockard	Acting Election Program Manager – Voter Services	laura.lockard@metrokc.gov
Laird Hail	Elections Technology Services Manager	laird.hail@metrokc.gov
Harry Sanders	GIS Supervisor/Special Projects Manager	harry.sanders@metrokc.gov

1.10.1 Transition planning sessions

Meetings are held weekly, as the election schedule allows, to review work documents, materials and information. Currently, meetings occur each Thursday afternoon and last for three hours.

1.10.2 Facilitation

Meetings of the Transition Leadership Team are facilitated by the Transition Manager with the support of Waldron & Co. staff.

1.10.3 Materials and documentation

Materials and documentation for meetings are distributed to team members by the afternoon before the meeting, at the latest, to give individuals adequate time to prepare for the meeting.

1.10.4 Meeting agendas and minutes

Meeting agendas are prepared by the Transition Manager and minutes are taken by transition support staff. These documents are archived in a shared drive accessible by team members.

1.11 Project staffing

The Transition Leadership Team is supported by a team of staff dedicated to the transition process, the Transition Team.

VBM Transition Team

Name	Position	E-mail address

Bill Huennekens	Transition Manager	bill.huennekens@metrokc.gov
Courtney Caswell	Functional Analyst (Focus on Regional Voting Centers)	courtney.casewell@metrokc.gov
Colleen Kwan	Functional Analyst (Focus on Ballot Tracking and Accountability)	colleen.kwan@metrokc.gov
Megan Coppersmith	Communication Specialist (Internal and External Communications)	megan.coppersmith@metrokc.gov
Bonnie Duncan	Fiscal Specialist (HAVA Grant Accounting)	bonnie.duncan@metrokc.gov
Alex Herzog	Administrative Specialist III (Transition Administration and Ballot Drop Locations)	alex.herzog@metrokc.gov
Jim Hunt	Functional Analyst (Focus on Information & Technology)	james.hunt@metrokc.gov
Lauren Engel	GIS Analyst	lauren.engel@metrokc.gov

1.11.1 Weekly team meetings

Transition Team meetings are held weekly each Monday morning to plan the upcoming week's activities and work schedule.

1.11.2 Meeting facilitation

Weekly meetings of the Transition Team are facilitated by the Transition Manager.

1.11.3 Meeting agendas and minutes

Meeting agendas are prepared by the Transition Manager and minutes are taken by transition support staff. These documents are archived in a shared drive accessible by team members.

1.12 Architecture and interoperability

The data captured and generated for ballot tracking must be interchangeable electronically with the existing voter registration system and Web application software in use. This electronic integration must be as easy, seamless and as close to real time as possible. This interface should be automated and simple to use, with minimal manual intervention and facilitation.

1.13 Alternatives and feasibility

An alternative to the upgraded ballot tracking and accountability system is to maintain the status quo, relying on the labor intensive, manual process. Due to the increase in mail ballots to be processed, maintaining the status quo will present significant risks, including longer hours, multiple shifts and more processing staff.

1.14 Preferred approach

Outbound mailing of ballot packets
After extensive evaluation of the equipment, office space, staff and commitment necessary to perform bulk insertion of 1 million ballot packets needed for a countywide vote-by-mail election, King County Elections has found continued outsourcing of this process is the best solution. King County Elections will continue to work with the current and any future print and insertion vendors to improve the accountability of this process. Therefore, vendor's responses to outbound insertion solutions were not rated.

Inbound processing of mail ballot packets
After examining our current process and evaluating the King County Council's requirement to provide voters with the ability to track their ballots, King County Elections recommends that technologies be purchased and implemented to:

1. **Perform ballot sorting, data capture and batching in-house.** This will increase ballot security and provide greater process transparency to the observing public. This will also allow for process efficiency by decreasing transport time and minimizing numerous manual hand-offs.

2. **Capture the signature image on the envelope.** Working with the image of the signature envelope, as opposed to the ballot-containing envelope itself, will allow KCE to place ballots in secure storage while the signature verification process occurs. Process efficiency will be gained from side-by-side comparison on a computer monitor.

3. **Implement automatic signature recognition.** The use of automatic signature recognition will provide greater efficiency to the signature verification process. Automating this process will provide greater consistency in evaluating signatures. Ultimately, KCE staff will examine each signature rejected by the software application.

4. **Automate data capture for reconciliation.** Automating data captured for accountability and reconciliation will remove the variable of manual data entry, providing greater efficiency and accuracy. Greater accountability and transparency will be accomplished through improved reporting capabilities.

5. **Capture voter data after a ballot packet has been opened.** The ability to capture data after a voter's ballot packet has been opened and the security envelope with the ballot has been removed will increase process transparency, allowing the voter to confirm that their ballot is ready for tabulation. This will occur with hand scanners at each opening station or through high speed envelope

scanners at quality control stations. Data captured will also provide greater accountability and efficiency for reconciliation purposes.

1.15 Opposing arguments and responses

Opposing arguments and views surrounding specific elements of ballot packet tracking and accountability solutions are listed below.

Automatic Signature Recognition (ASR) for signature verification

Concerns have been raised about the difficulty for individuals other than machine operators to observe signature verification in an ASR environment. Observations of this process would be limited, as the bulk of verification will be done through software application and monitored by trained staff.

In implementing ASR, King County Elections would follow rules adopted by the OSOS outlining the use of this technology. The technology is designed to allow for users to set minimum confidence levels for automated signature verification. King County would work under the OSOS guidelines in setting these confidence levels and the information regarding confidence levels would be widely available.

Once the confidence rating is set, the technology accepts signatures that pass a certain level. Signatures that do not pass this confidence rating will not be permanently rejected but rather removed from the batch and reviewed by a trained, human operator. No signature will be rejected without human eyes confirming that indeed, the signatures do not match. The system's reliability and consistency will be audited and monitored constantly to ensure the acceptance and rejection levels are in compliance with state rules and regulations.

The implementation of ASR will not eliminate all human verification but will reduce the number of signature that a human operator will need to compare. A reduction in ballot packets requiring human verification will reduce the number of staff needed to perform the human verification and streamline the process.

It is a logical assumption that the implementation of ASR will result in a more consistent interpretation of signature matches. The software application uses the same criteria and methodology each time, from the same technology used in many other industries.

Barcodes or identifying marks on ballots

Allowing voters to track their ballots entirely through tabulation would require a unique identifier on the ballot itself. The main concerns of placing unique identifiers on the ballot revolve around three aspects: political, legal, and preserving the secrecy of the voter's ballot.

Political Concerns
The State of California has prohibited the use of a unique identifier on the ballot and Washington State may not be far behind. While an amendment was introduced but not adopted in the latest Legislative session, this issue is far from resolved and will likely be discussed in the future.

Ongoing Legal Issues
Four counties in Washington State offer voters a Web interface to track their ballot through tabulation. San Juan County is one of these counties and has been named in a lawsuit to remove this feature. The outcome of the court case is not yet decided and will likely set precedent regarding voter secrecy and ballot tracking in Washington.

Maintaining the secret ballot
The use of a unique identifier on a ballot for the purpose of tracking voted ballots is viewed by some as compromising the voter's right to a secret ballot. While the encryption technology available is compelling, King County Elections does not want to compromise the spirit or legal definition of the secret ballot. Sufficient accountability can be attained with tracking to the return envelope level, not to the ballot.

The ability to track and account for each ballot packet is essential to open and transparent elections. However, tying the voter back to his or her ballot may pose legal concerns and has several unknown risks that must be addressed carefully before King County considers ballot tracking through tabulation.

Enhancing the tracking system already in place, a bar code on the ballot envelope and with other data collection tools and process management software, will improve ballot tracking and reconciliation, and give voters ultimately what they want: the ability to verify their ballot packet was received by King County and their signatures were verified.

King County Elections' recommends further discussion and study of enhanced ballot tracking using a unique identifier on the ballot when and if legal issues in San Juan County are resolved and acceptance of such technology is studied. Until then, we believe the public is best served by tracking ballots by the outer envelope and not using a bar code on the ballot.

2.0 Budget

The need created by the transition to vote-by-mail and the award of a federal grant through the Help America Vote Act (HAVA) provide a unique opportunity to improve and enhance King County's ballot packet tracking and accountability

system. The available $2.7 million in HAVA funds will fund King County's expenditure to purchase, implement, and initially maintain the equipment.

The solution proposed for accountability and ballot tracking purposes will meet strategic business needs, policy directives and add valued service to voters in a vote-by-mail environment.

2.1 Vendor proposals

Proposals can be found with the information submitted in response to the requests for information submitted by each of the vendors in exhibits 5 to 8.

3.0 Vendor background

Diebold Election Systems
Diebold Corporation purchased Global Elections Systems in 2001 to form Diebold Election Systems. Diebold Election Systems products and services are used in Klickitat County, Washington, Los Angeles County, California, Ohio, Georgia, Utah, Mississippi and Maryland along with many other jurisdictions in California, Arizona, Kansas, and Florida

Cowart Gagnon
Cowart Gagnon, a Puyallup based company, has provided mailing processing equipment and solutions since 1988. Spokane County is currently implementing the Cowart Gagnon equipment investigated by King County.

K&H Printing
K&H Printing has provided a variety of election services to counties in Washington since the 1940s. K&H currently prints ballots for Snohomish County and provides an automated ballot tracking and accountability system. Note: K&H Printing chose not to submit a bid for this project.

Pitney Bowes
Pitney Bowes is a Fortune 350 company that has provided mail processing services for 85 years. The technology underlying the Relia-Vote system is used in over 25 Fortune 500 companies.

The Relia-Vote system has operated in Orange County, CA since 2004 and was used in 9 counties during the 2006 election cycle.

VoteHere
Founded in 1998, VoteHere is a division of Dategrity Corporation and is based in Bellevue, WA. The system is currently used for ballot tracking in over 20 counties in Washington, Spokane County is the largest jurisdiction. The system investigated by King County Elections, the MiBT

(Mail-in Ballot Tracker) has been used in over 70 elections in Washington State.

3.1 Current vendor

Diebold Elections Systems is the current vendor for outsourced outbound and inbound mail ballot processes. Diebold Elections Systems provides services for ballot printing; outbound ballot packet assembly; mail sorting and bulk mail entry; and inbound ballot sorting and data capture.

3.2 Selection process

Each of the vendors providing solutions for ballot envelope tracking and accountability in the elections industry were invited to present their solutions: Diebold Elections System, Cowart Gagnon, K&H Printing, Pitney Bowes, and VoteHere.

These vendors were sent a request for information and asked to provide pricing information based on the predetermined functional requirements. Vendors were provided three weeks to submit product information and clarify any questions. K&H Printing did not respond to the request for information or provide pricing information, and was not further considered.

The following functional ballot packet tracking points and associated business requirements were distributed to potential vendors to obtain possible hardware and software solutions and cost estimates.

BALLOT PACKET TRACKING POINTS	FUNCTIONAL REQUIREMENTS

1. Voter's ballot packet has been assembled and handed off to USPS	1. Insertion (bulk and daily insertion) A. Bulk insertion for all election-qualified voters on file: confirm correct ballot materials assembled. B. Daily insertion for new registrations and re-issues: confirm correct ballot materials assembled. Correct return ballot packet format for data capture to be the same as bulk insertion. C. Over-the-counter insertion and issuance of ballots: confirm correct ballot materials assembled. Correct return ballot packet format for data capture to be the same as bulk insertion. D. Must have the capability for possible future addition of randomized unique identifier on ballot and/or ballot stub. 2. Capture of data from outbound envelope and ballot that confirms correct ballot materials assembled. 3. Ability to upload to and / or provide seamless election data information to Data Information Management System (DIMS) / voter registration system. 4. Third party confirmation program for in-house Quality Assurance management.
2. King County confirms receipt of ballot packet	1. Data captured from inbound envelope to confirm King County Elections' receipt of ballot packets. 2. Ability to upload data to and/or provide seamless electronic data interface with DIMS/voter registration system.

3. Signature on ballot packet has been verified or challenged	1. Automated signature verification that is compatible with DIMS. A. Ability to capture image of envelope for automated and manual signature verification and public information requests. B. Ability to capture data from envelope to confirm voter's signature was verified or challenged. C. Automation to maximize efficiency for signature verification process. D. Automation to maximize efficiency for exceptions handling and data management. Currently there are 19 challenge codes. E. Ability to upload data to and/or provide seamless electronic data interface with DIMS / voter registration system.
4. Ballot packet has been opened for ballot extraction	1. Capabilities for scale and dimension differentiation to pre-qualify ballot packets for opening. (These functions will be used to screen out packets with missing ballots or multiple ballots enclosed.) 2. Sort signature-verified ballot packets by legislative district or ballot code or other criterion as specified for recount purposes. 3. Automated slicing/opening of envelopes. 4. Batch in 200-400 per tray to prepare for extraction. 5. Ability to capture data from ballot envelope to confirm it was opened for extraction. 6. Ability to upload data captured to and/or provides seamless electronic data interface with DIMS/voter registration system. 7. Ability to capture unique identifier on ballot for exceptions handling and data management. (To preserve future functionality, if necessary.) 8. Ability to upload ballot unique identifier data to and/or provide seamless electronic data interface with DIMS/voter registration system. (To preserve future functionality, if necessary.)

As mentioned above in section 1.14, King County initially asked vendors to submit proposed solutions for the outbound insertion and mailing of mail ballot packets. King County Elections recommends continuing to outsource this work. The risk, complexity and resources necessary to bring this function in-house would not be a wise investment for King County at this time.

In addition to the submitted responses, several site visits were embarked upon to see the proposed technologies in real-world applications. Three staff members traveled to Miami Dade County, Florida, to observe the Pitney Bowes insertion and inbound equipment in operation. Staff also observed the K&H solution in operation in Snohomish County, Washington. Diebold equipment was observed in operation in a test environment in Whatcom County, Washington and other proposed Diebold equipment was observed in use in another business application.

Interviews were conducted with several counties in Washington that use the VoteHere product. Cowart Gagnon equipment is currently in the early stage of implementation in Spokane County, and as a result, was not available for observation.

Information submitted by the vendors was extensive and complex, requiring a subgroup of members of the Transition Leadership Team to be established. This subgroup examined the information provided by the vendors to rate them on the previously established criteria outlined in section 3.3. These ratings and recommendations were brought back to the entire Transition Leadership Team and thoroughly reviewed, discussed and approved by the whole group. *See,* exhibit 9.

3.3 Selection criteria

1. Vendor's ability to meet the functional business requirements listed below. These include all essential outbound and inbound functional business requirements. They include:

1. Data capture to confirm receipt of returned ballot packets.
2. Ability to upload data with minimal manual intervention and/or facilitation.
3. Capture image of signature from the envelope.
4. Capture entire image of envelope with ability to parse out signature for verification.
5. Compare ballot envelope signature and reference signature in voter registration database with use of automated signature verification (ASR) software.
6. Upload results from automated signature verification and export signature images for viewing within DIMS.
7. Has weight and/or dimension differentiation function(s) to pre-qualify ballot packets for opening.

8. Ability to sort ballot packet envelopes by legislative district or by other specified criteria after signature is verified
9. Has sliced / open functionality for sealed ballot packet envelopes.
10. Be able to batch in 200-400 per tray to prepare for opening and extraction.
11. Data capture function to confirm envelope has been opened for extraction.
12. Has interface and tools for system integration and process management.

2. Ability to meet requirements set forth in the security plan.
Vendor solution must meet general requirements of Elections Security Plan. It must have the ability to secure (to the maximum extent possible) hardware, software, database and any data interface links from accidental and/or unauthorized modification and/or deletion and/or access. The system must provide the ability to maintain a chain of custody of ballots and envelopes throughout the entire process.

In addition, the system is expected to facilitate:

1. Maintenance of an open and transparent election environment for public observation.
2. Compliance with established legal and procedural security through established chain of custody, data validation, audit reports, transaction logs and two person integrity.
3. Compliance with established technical and system security through use of strong passwords.

3. Risk exposure. Minimize King County's risk exposure due to delays, complexities of solution and vendor's lack of knowledge and experience with elections and King County Elections' business procedures.

4. Accuracy. There should be quality control elements in place to verify the accuracy of data captured. Quality control measures include but are not limited to well defined procedures for data validation reports and audit of sample(s) at scheduled time intervals throughout the election processing cycle at each data capture point.

5. Capacity, scalability, flexibility and ease of use. System should have the ability to handle the necessary volume of inbound ballot mail pieces, able to meet new requirements, accommodate growth, and ability to handle various sized elections, easily configurable for different operations, and settings easily adjustable to address variable election administration needs.

6. Compatibility, open architecture, universal data format.
The data captured and generated for ballot packet tracking must be interchangeable electronically with the existing voter registration system and

Web application software in use. The electronic data interchange should be easy, seamless and as close to real time as possible. The interface developed and used for such interchange should be simple and as automated as possible with minimal manual intervention and facilitation.

7. Reliability, nature and frequency of maintenance.
The system is expected to function continuously without fail through an election processing cycle. The mean time between failures should equal a minimum of two million ballot packets / document pieces. There should be built-in redundancy without any single point of failure. Maintenance issues should be dealt with easily with minimal delay, so as not to affect ballot processing. If vendor's technical support is required on site, the response time and problem resolution must be at a level that addresses and meets King County Elections' deadline requirements. Easy access to component and replacement parts should be readily available for malfunction and failure resolution.

8. Space and weight. The layout and design of equipment and hardware should minimize space and weight requirements without sacrificing operational flow, efficiency and effectiveness, and without posing any risk associated with weight overload per square foot of floor space in the new Elections' facility in Renton. The weight and space established for the equipment is 125 pounds per square foot. With a maximum of two machines, each machine should not exceed 11 feet wide and 40 feet long.

9. Cost. Consistent with the previous business case, the cost of the equipment is evaluated against the amount of HAVA funds available $2.7 million.

3.4 Vendor rating

Inbound process

Vendors were evaluated on functional requirements and established criteria using a six point scale from zero to five. Zero was equivalent to "Does not meet requirements / criterion" and five equaled "Exceeds all elements of requirements / criterion."

VoteHere stood separate from Diebold, Pitney Bowes and Cowart Gagnon as it offered a process management software application (MiBT) with minimal hardware. In terms of functional requirements, VoteHere's solution scored not applicable for ten of the 12 requirements, and obtained a rating on two: the ability to capture voter identifying data after the envelope was opened, and system integration and process management.

Of the 12 functional requirements, Diebold, Pitney Bowes and Cowart Gagnon scored similarly with their ability to capture signature information and batch in groups of 200 to 400 ballot packets per tray.

Both Pitney Bowes and Cowart Gagnon were able to offer hardware and/or software in 11 of the 12 functional requirements, and Diebold offered 10 of the 12. Pitney Bowes scored a total of 85 with Cowart Gagnon trailing at 82 and Diebold with 71.

Vendor's solutions were then scored on eight criteria: security; accuracy; capacity; scalability, flexibility and ease of use; compatibility; reliability and maintenance; space and weight; and cost. The total scores for criteria were very close, with Pitney Bowes at 25, followed by Cowart Gagnon at 24 and Diebold at 23.

Individual scoring of potential vendors can be found in exhibit 9. Section 3.6 also describes scores and justifications.

3.5 Vendor recommendation and justification

King County Elections recommends purchasing and implementing two Pitney Bowes' Olympus II Relia-Vote 32 Bin scanning and sortation systems and associated software and hardware configuration for ASR. King County also recommends purchasing and implementing VoteHere's MiBT ballot packet tracking software and solution.

The VoteHere MiBT ballot tracking software comes in two versions: envelope-only tracking (at a reduced cost), and full envelope and ballot tracking. At this time, KCE recommends the purchase of the envelope-only tracking version, with the option to upgrade to the full version if and when necessary.

Pitney Bowes' Olympus II Relia-Vote 32 Bin scanning and sortation system and associated software and hardware configuration for ASR will address the first three specific business objectives – 1) Perform ballot packet sorting, data capture and batching in-house, 2) Capture the signature image on the envelope and 3) Implement automatic signature recognition. Two systems are recommended for redundancy and to accommodate the volume associated with a jurisdiction the size of King County.

The Pitney Bowes' solution rated highest when evaluated for functional requirements and against the evaluation criteria. The Pitney Bowes system received a total weighted score of 85 for evaluation of functionalities and a 25 when evaluated against the criteria.

As detailed in exhibit 9, the Pitney Bowes equipment is the preferred equipment as it has the capabilities to:

- Capture ballot packet id, endorse with date/time and compare to the database for id validity.

- The Pitney Bowes equipment has ability to find ballot packet id anywhere on ballot envelope and differentiate based on weight and thickness of the ballot packet, allowing this to be done at first pass through vendor scan/sort equipment.
- Adjustable sorting schemes and expandable number of bins. Digital display of sorter bin contents. Capable of adding challenge code to outside of ballot packets after signatures were verified on second pass if desired.

Pitney Bowes is currently developing an interface to the Parascript technology. Pitney Bowes has extensive experience using Parascript technology in other industries and King County Elections will have the opportunity to work with Pitney Bowes on development of an interface that will directly meet organizational and voter's needs.

There are potential risks associated with the Pitney Bowes solution regarding integration with our current systems. However, these risks will be mitigated through future implementation in Pierce County, Washington, as they use the same election management and voter registration systems as King County. King County expects to benefit from a collaborative effort in this implementation.

VoteHere's MiBT ballot packet tracking software offers the only true system integration and process management tool and will help us address the fourth and fifth specific business objectives – 4) Automate data capture for reconciliation with an emphasis on challenged ballots and ballots separated for duplication and 5) capture voter data after a ballot packet has been opened.

MiBT is specifically designed to take data captured at various points in the process and provide a near real-time look at where ballot packets are in the mail ballot process and show process area balances or imbalances. Processes can be fully automated by scanning barcodes on mail pieces at various points in the process.

VoteHere's MiBT ballot tracking software is in use and working effectively in several jurisdictions in Washington.

In order to fully realize the benefits of the Pitney Bowes and VoteHere solutions, King County Elections may need to supplement the system with additional scanners, or other equipment, at key processing points. For instance, in order to capture information at opening, we will need small desktop scanners ($200 each) that attach to a personal computer (about $1,500 each). These scanners can capture the ballot packet id at a rate of over 2,000 per hour. If deployed in a location without a PC, it would be necessary to purchase a PC in addition to the scanner. Other options include high speed scanners that process at a faster speed and would be used at high volume locations and range in cost from

$15,000 to $70,000. These solutions will be further explored during the process design efforts conducted with the selected vendors.

The additional tracking point locations for internal management and applicable equipment will be analyzed as part of the scope of work done by the vendor(s) selected to implement the ballot tracking and accountability solution.

The other vendors that offered solutions are not recommended for a variety of reasons.

The Cowart Gagnon equipment was not rated as high as Pitney Bowes. The information supplied by Cowart Gagnon was essentially a collection of equipment brochures, with no insight into improving processes or meeting business functions. Cowart Gagnon does propose using the Parascipt technology mentioned above but did not provide interface specifications. Overall the Cowart Gagnon solution is seen as a risk because the vendor has not fully implemented in any election jurisdiction. Their elections experience is limited to one medium sized jurisdiction.

Diebold has an inherent advantage as the current vendor for the election management and voter registration systems and the recommended solution for the ballot tabulation equipment upgrade. Diebold currently has an interface for the Parascript technology described above, recently implementing it in Los Angeles County, California for automatic signature recognition of returned absentee ballots. However, overall the proposed solution lacks the flexibility and functionality sought by KCE. Some examples of this include: no demonstrated high speed ballot packet tracking and accountability equipment, no flexibility for sorting with the existing equipment, and no ballot packet size or weight differentiation function.

In summary, by combining the quality equipment and process management expertise from Pitney Bowes, the database and process management tools offered by VoteHere and the expertise of King County Elections, the citizens of King County will be well served with a ballot packet tracking and accountability system they can rely on.

In addition to meeting outlined criteria and the expectations of the public, Pitney Bowes has a worldwide reputation for service and quality in mail processing. The combination of Pitney Bowes, VoteHere and Diebold, the recommended tabulation vendor, will offer checks and balances for the overall tabulation system.

Attached Exhibits

Exhibit 1: Nine Major Processing Points

Exhibit 2: Ballot Tracking & Accountability: Study of Current Process

Exhibit 3: King County Elections Focus Groups

Exhibit 4: VBM: Ballot tracking with and without a unique identifier on the ballot

Exhibit 5: Diebold Elections Systems: Response to Questions

Exhibit 6: Pitney Bowes: Response to Questions

Exhibit 7: Cowart Gagnon: Response to Questions

Exhibit 8: VoteHere: Response to Questions

Exhibit 9: Evaluation of vendor proposed solution